Patent Abstracts of Japan

PUBLICATION NUMBER : 04094410
PUBLICATION DATE : 26-03-92

APPLICATION DATE : 10-08-90
APPLICATION NUMBER : 02210459

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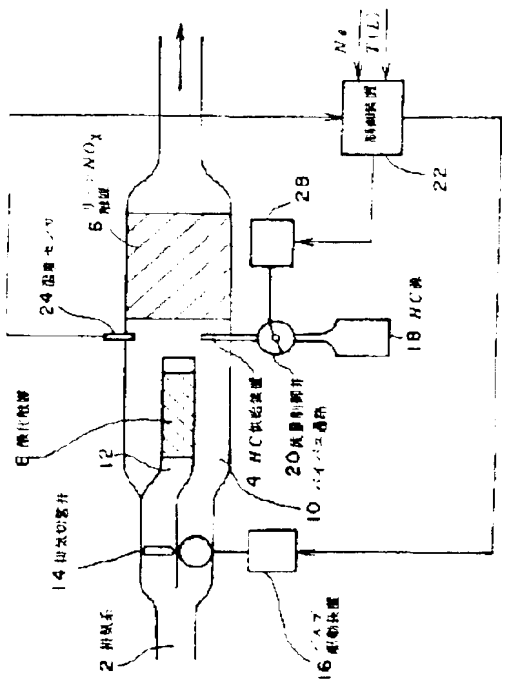
INT.CL. : F01N 3/28 F01N 3/08 F01N 3/20
F01N 3/36

TITLE : EXHAUST PURIFIER FOR INTERNAL COMBUSTION ENGINE



ABSTRACT : PURPOSE: To improve the NOx purification ratio of a lean NOX catalyst 6 by controlling an exhaust selector valve so that the exhaust gas flows to the oxidation catalyst side when the exhaust gas temperature is low and to the bypass passage side when it is high.

CONSTITUTION: A bypass passage 10 is provided on an exhaust system 2, and the flow of the exhaust gas is selectively switched by an exhaust selector valve 14 between a passage 12 on the oxidation catalyst 8 side and the bypass passage 10. When the exhaust gas temperature detected by a temperature sensor 24 is low, the exhaust system 2 is set to the bypass-off state by the calculation of a control device 22, and the exhaust gas flows to the oxidation catalyst 8 side. The temperature of the exhaust gas is increased by the oxidation of CO, HC existing in the exhaust gas, the temperature of the exhaust gas passing the lean NOX catalyst 6 is increased, thus the lean NOX catalyst 6 is activated. The HC concentration is reduced immediately before the lean NOX catalyst 6, thus HC is fed from an HC feeder 4. Sufficient HC is obtained by the lean NOX catalyst 6, the catalyst floor temperature is high, thus a high NOX purification ratio is obtained.